UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/649,088	08/07/2000	Shrikumar Hariharasubrahmanian	SHRIKUMAR	5951

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EXAMINER
BLOUNT, STEVEN

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No. 09/649,088	Applicant(s) HARIHARASUBRAHMANIAN, SHRIKUMAR
	Examiner Steven Blount	Art Unit 2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 October 2002</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other:

Claim Rejections - 35 USC § 112

1.   Claim 11 is objected to, "instrucitons" in lines 2 – 3 a typographical error.

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 3 - 4 and 7; and 8 - 10 and 26 are rejected under 35 U.S.C. 112 second

paragraph for failing to particularly point out and distinctly claim the subject matter which

the applicant regards as their invention.

In claim 3, since the psudo-header is already denoted to be in the data field in

claim 1, claim 3 does not further limit claim 1. In claim 8, "the protocol data field"

mentioned in line 6 is indefinite, because it is not properly defined. In the specification

on page 18 lines 4+, it is stated that the protocol field, which is in the header, "includes

data that identifies the type of transport protocol". If the data is in the header, then how

can you generate a pseudo-header "after the protocol header" and "before the protocol

data field"? Further, "the protocol data field" lacks antecedent basis. In claim 10, an

"additional checking step" is performed, but there is not a "previous" checking step

mentioned in claims 8 or 9 which would make an "additional" step of this form possible.

With regard to claim 26, the examiner requests that the language in the preamble be

changed to language such as "a device for implementing the method according to claim

20, wherein......".

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

5.   Claims 8 and 11 are rejected under 35 U.S.C. 112 first paragraph for failing to

provide a specification that would enable one of ordinary skill in the art to make and use

the invention.

In claims 8 and 11, there is no support for placing a psudoheader after the

protocol header and before the protocol data field.

Claim Rejections - 35 USC § 103

6.   Claims 1 – 7 and 18 - 26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. patent 6,625,147 to Yokoyama et al in view of U.S. patent

6,590,903 to Hofers et al.

With regard to claim 1, Yokoyama et al teaches transmitting data with psudo-

headers, and also teaches recalculating the FCS in col 8, lines 20+, before rewriting the

transfer packet. It is also well known that TCP/IP uses "reply packets" (ie, ack/nak) to

reply to whether a message was successfully sent or not. Yokoyama et al does not

however teach formatting the psudo-header "within" (ie, inside) the data field; see col 7,

lines 65+: "with the IP header and the TCP/UDP header being added to a data field".

Hofers et al is cited for the fact that it is known to carry protocol conversion data

within the data field. See col 5, lines 60+ (the examiner further believes that there is no

appreciable difference between adding the information to the data field (ie, at the base)

as opposed to within the field, and that it would be obvious even without the teachings

of Hofers et al. See, importantly, page 14, line 16 of the specification "The network layer

330 may generate packets called datagrams by attaching, *to the data field*, an IP

header 332 and trailer 334" (emphasis added)).

It would have been obvious to one of ordinary skill in the art at the time of the
invention to have placed the psudo-header information of Yokoyama et al "within" the
data field, in light of the teachings of Hofers, in order to allow for a greater variety of
places to place the data in the packet and hence allow for a less rigid protocol.

With regard to the following claims (hereinafter referred to as "CI") note the
following:

CI 2: UDP is mentioned in line 67; CI 3: note the above; CI 4 and 7: see col 8,
lines 20+; CI 5 - 6: see see col 7, line 67; with regard to claims 18 – 20, see col 8, lines
20+ (especially lines 21 and 25). With regard to claims 21 – 26, see the rejections
above, including the logic circuitry in figure 3.

7.   Claims 8 – 17 are rejected under 35 U.S.C. 103(a) as being obvious over U.S.
patent 6,625,147 to Yokoyama et al.

With respect to claims 8 and 11, Yokoyama et al teaches the invention as
described above including adding the IP header to the data field (col 7, lines 65+) which
corresponds to generating "at least one pseudo-header after the protocol header and
before the protocol data field" (lines 5 – 6 of claim 8, corresponding to page 14, lines
16+ as best understood by the examiner in view of the 112 rejections above). Although
a memory is not specifically mentioned in Yokoyama, it is inherently part of the system.
With regard to claim 9, generating replies in systems such as these is well known in the
art. With regard to claim 10, note the use of FCS above. With regard to claims 12 – 17,
see the rejections above.

7.   Claims 1, 8, 11, and 21 are rejected under 35 U.S.C. 103(a) as being obvious

over U.S. patent 6,590,903 to Hofers et al in view of applicants admitted prior art

(AAPA).

With regard to claims 1 and 21, Hofers teaches protocol conversion using a

psudo-header comprised of information within a frame. Hofers et al does not however

teach the use of a reply packet, or a validity check.

AAPA teaches replying in page 3, third to last line. Further, validity checking

through such means as FCS are extremely well known in the art. It would have been

obvious to one of ordinary skill in the art at the time of the invention to have provided

Hofers with a reply means, in light of the teachings of AAPA, in order to provide a

means for allowing for more reliable communication.

With regard to claim 8, see col 5 lines 30 and 60+, and note that it would be

obvious to have the pseudo-header after the protocol header field and before the data

field, as having it in the data field is an obvious equivalent to having it before the data

field.

With regard to claim 11, see the rejection of claim 8 above, and note that the

process is implementable in a computer using a program stored on a computer

readable medium.

8.   Claim 18 is rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent

6,590,903 to Hofers et al.

With regard to claim 18, see col 2 lines 25+ and note that while the identification of the "prefix" is not explicitly mentioned, the teachings provided in Hofers et al would render this obvious.

9.   Steven Blount may be reached at 703-305-0319 Monday through Friday between the hours of 9:00 and 5:30 P.M.

SB
11/18/03